

compared to prior art modulation systems. Additionally, the present invention is well suited for use with a wide variety of compressor types.

Bass, on the other hand, discloses a compressor capacity modulation system which is particularly suited for use in scroll-type compressors. More specifically, the valving arrangement of Bass operates to selectively apply a biasing fluid pressure to a movable member to thereby cyclically create and eliminate a leakage path from the compression chamber. At no time does the valve of Bass operate to prevent flow of suction gas into the compression chamber as does the valve of the present invention as specifically recited in both claims 1 and 17. At most, the valve of Bass when open allows the venting of a pressurized chamber into the suction flow path to the compressor. Nevertheless, regardless of whether the valve is open or closed, suction gas will flow through the suction inlet to the compressor in Bass.

Thus, it is respectfully submitted that the present invention as defined by claims 1 and 17 distinguish over Bass in that Bass does not disclose the use of a valve to selectively allow and prevent flow of suction gas to the compression mechanism.

Claim 29 defines a method of modulating the capacity of a compressor in a cooling system in which a cycle frequency is determined having a maximum duration that minimizes the variation in suction pressure of a refrigerant being supplied to the compressor and then determines first and second time periods for allowing and preventing suction gas flow to the compressor to accommodate the system load wherein the sum of the first and second time periods is equal to the cycle frequency. This method is neither disclosed by nor suggested by Bass.

Bass merely provides a valve which is pulsed in a manner to selectively achieve sealing and allow a leakage path within the compressor to thereby modulate same to

accommodate a load. There is no mention of determining a cycle time of a maximum duration which will minimize variation in suction pressure as is specifically required by claim 29.

Accordingly, it is respectfully submitted that claim 29 distinguishes over Bass and withdrawal of the rejection thereof is respectfully requested.

In view of the above remarks, it is submitted that this application is in condition for allowance and such action is respectfully requested.

Respectfully submitted,

By: 

Richard L. Carlson  
Reg. No. 27863  
Attorney for Applicant

Harness, Dickey & Pierce, P.L.C.  
P. O. Box 828  
Bloomfield Hills, Michigan 48303  
(248) 641-1600

June 1, 2000  
RLC/jb